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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/647,059

Applicant(s)

CRANE ET AL.

Examiner

Jeff Piziali

Art Unit

2629

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5 March 2008 has been entered.

Drawings

2. The drawings were received on 6 February 2004. These drawings are acceptable.
3. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the figures.

Specification

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-5, 7-15, and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 recites the limitation "**headgear**" (in line 2). The lack of a grammatical article (such as "**a**" or "**a plurality of**" or "**the**" or "**said**") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

8. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**the headgear**" (in line 6). It would be unclear to one having ordinary skill in the art whether this limitation refers to the earlier claimed "**headgear system**" (in line 1); "**headgear**" (in line 2); "**upper headgear portion**" (in line 2); or "**lower headgear portion**" (in line 3).

An omitted structural cooperative relationship results from the claimed subject matter: "**the display**" (in line 19). It would be unclear to one having ordinary skill in the art whether this

limitation refers to the earlier claimed "*display assembly*" (in line 6) or "*viewing display*" (in line 8).

9. The term "*obstruct the user's vision*" (in claim 1, line 7) is a relative term which renders the claim indefinite. The term "*obstruct*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Determining what qualifies as an "*obstruction*" depends upon the subjective vision intensions of any given user. If the user wants to look at the display assembly, what could the assembly be said to be "*obstructing*"? In another sense, if the user can see the assembly at all then it necessarily follows that the assembly is in front of and "*obstructing*" everything behind it. If that is the case, then the instant invention does not appear to be enabled for a display assembly that does not "*obstruct the user's vision*".

10. Claim 1 recites the limitation "*information*" (in line 10). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation. For example, it would be unclear to an artisan whether a single element of "*information*" is being claimed; or rather whether a plurality of "*information*" elements are being claimed.

11. Claim 1 recites the limitation "*distance vision*" (in line 12). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it

unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

12. Claim 1 recites the limitation "*line of sight*" (in line 12). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

13. The term "*substantially inline*" (in claim 1, line 15) is a relative term which renders the claim indefinite. The term "*obstruct*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It would be unclear to one having ordinary skill in the art precisely how "*inline*" (by a measurable, definable degree, range, or value) the user's eyes and the optics must be before they would qualify as being "*substantially inline*".

14. Claim 1 recites the limitation "*orientation*" (in line 17). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

15. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*the joint*" (in line 2). It would be unclear to one having ordinary skill in the art whether this limitation refers to the earlier claimed "*at least one rotatable joint*" (in claim 3, line 2); "*first rotatable joint*" (in claim 1, line 18); or "*second rotatable joint*" (in claim 1, line 20).

An omitted structural cooperative relationship results from the claimed subject matter: "*a particular orientation*" (in line 3). It would be unclear to one having ordinary skill in the art whether this limitation is identical to the earlier claimed "*orientation*" (in claim 1, line 17); or whether this limitation is distinct and independent from the earlier claimed "*orientation*".

16. Claim 3 recites the limitation "*frictional resistance*" (in line 2). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

17. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*said one of the user's eyes*" (in line 2). It would be unclear to one having ordinary skill in the

art whether this limitation refers to the earlier claimed "*one of the user's eyes*" (in claim 4, line 2) or "*at least one of the user's eyes*" (in claim 1, line 7).

18. The term "*appear*" (in claim 5, line 2) is a relative term which renders the claim indefinite. The term "*appear*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. "*Appearances*" are purely subjective, based on undefined and immeasurable design/user goals and intensions.

19. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*two side members*" (in line 8). It would be unclear to one having ordinary skill in the art whether this limitation is identical to the earlier claimed "*upright side members*" (in claim 1, line 22); or whether this limitation is distinct and independent from the earlier claimed "*upright side members*".

20. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*a first eye of the user*" (in line 2) and "*a second eye of the user*" (in line 4). It would be unclear to one having ordinary skill in the art whether either of these limitations is identical to the earlier claimed "*the user's eyes*" (in claim 1, line 4); or whether this limitation is distinct and independent from the earlier claimed "*the user's eyes*".

21. Claim 8 recites the limitation "*at least one viewing display*" (in line 4). There is insufficient antecedent basis for this limitation in the claim.

22. Claim 9 recites the limitation "*headgear*" (in line 2). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

23. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*the headgear*" (in line 3). It would be unclear to one having ordinary skill in the art whether this limitation refers to the earlier claimed "*headgear system*" (in line 1) or "*headgear*" (in line 2).

An omitted structural cooperative relationship results from the claimed subject matter: "*the display*" (in line 5). It would be unclear to one having ordinary skill in the art whether this limitation refers to the earlier claimed "*display assembly*" (in line 3) or "*display*" (in line 3).

24. Claim 9 recites the limitation "*orientation*" (in line 5). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

25. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*two side members*" (in line 8). It would be unclear to one having ordinary skill in the art whether this limitation is identical to the earlier claimed "*upright side members*" (in claim 9, line 9); or whether this limitation is distinct and independent from the earlier claimed "*upright side members*".

26. Claim 11 recites the limitation "*information*" (in lines 1 and 10). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation. For example, it would be unclear to an artisan whether a single

element of "**information**" is being claimed; or rather whether a plurality of "**information**" elements are being claimed.

27. Claim 11 recites the limitation "**headgear**" (in line 2). The lack of a grammatical article (such as "**a**" or "**a plurality of**" or "**the**" or "**said**") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

28. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**the headgear**" (in line 6). It would be unclear to one having ordinary skill in the art whether this limitation refers to the earlier claimed "**headgear**" (in line 2); "**upper headgear portion**" (in line 2); or "**lower headgear portion**" (in line 3).

An omitted structural cooperative relationship results from the claimed subject matter: "**the display**" (in line 19). It would be unclear to one having ordinary skill in the art whether this limitation refers to the earlier claimed "**display assembly**" (in line 6) or "**viewing display**" (in line 8).

An omitted structural cooperative relationship results from the claimed subject matter: "**information**" (in line 10). It would be unclear to one having ordinary skill in the art whether this

limitation is identical to the earlier claimed "**information**" (in line 1); or whether this limitation is distinct and independent from the earlier claimed "**information**".

29. The term "**obstruct the user's vision**" (in claim 11, line 7) is a relative term which renders the claim indefinite. The term "**obstruct**" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Determining what qualifies as an "**obstruction**" depends upon the subjective vision intensions of any given user. If the user wants to look at the display assembly, what could the assembly be said to be "**obstructing**"? In another sense, if the user can see the assembly at all then it necessarily follows that the assembly is in front of and "**obstructing**" everything behind it. If that is the case, then the instant invention does not appear to be enabled for a display assembly that does not "**obstruct the user's vision**".

30. Claim 11 recites the limitation "**distance vision**" (in line 12). The lack of a grammatical article (such as "**a**" or "**a plurality of**" or "**the**" or "**said**") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

31. Claim 11 recites the limitation "**line of sight**" (in line 12). The lack of a grammatical article (such as "**a**" or "**a plurality of**" or "**the**" or "**said**") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

32. The term "***substantially inline***" (in claim 11, line 14) is a relative term which renders the claim indefinite. The term "***obstruct***" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It would be unclear to one having ordinary skill in the art precisely how "***inline***" (by a measurable, definable degree, range, or value) the user's eyes and the optics must be before they would qualify as being "***substantially inline***".

33. Claim 11 recites the limitation "***orientation***" (in line 17). The lack of a grammatical article (such as "***a***" or "***a plurality of***" or "***the***" or "***said***") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

34. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "***a headgear***" (in line 1). It would be unclear to one having ordinary skill in the art whether this limitation is identical to the earlier claimed "***headgear***" (in claim 11, line 2); or whether this limitation is distinct and independent from the earlier claimed "***headgear***".

35. Claim 13 recites the limitation "*frictional resistance*" (in line 2). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

36. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*the joint*" (in line 2). It would be unclear to one having ordinary skill in the art whether this limitation refers to the earlier claimed "*at least one rotatable joint*" (in claim 13, line 2); "*first rotatable joint*" (in claim 11, line 18); or "*second rotatable joint*" (in claim 11, line 20).

An omitted structural cooperative relationship results from the claimed subject matter: "*a particular orientation*" (in line 3). It would be unclear to one having ordinary skill in the art whether this limitation is identical to the earlier claimed "*orientation*" (in claim 11, line 17); or whether this limitation is distinct and independent from the earlier claimed "*orientation*".

37. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*said one of the user's eyes*" (in line 2). It would be unclear to one having ordinary skill in the

art whether this limitation refers to the earlier claimed "*one of the user's eyes*" (in claim 14, line 2) or "*at least one of the user's eyes*" (in claim 11, line 7).

38. The term "*appear*" (in claim 15, line 2) is a relative term which renders the claim indefinite. The term "*appear*" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. "*Appearances*" are purely subjective, based on undefined and immeasurable design/user goals and intensions.

39. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*two side members*" (in line 7). It would be unclear to one having ordinary skill in the art whether this limitation is identical to the earlier claimed "*upright side members*" (in claim 11, line 22); or whether this limitation is distinct and independent from the earlier claimed "*upright side members*".

40. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*a first eye of the user*" (in line 2) and "*a second eye of the user*" (in line 4). It would be unclear to one having ordinary skill in the art whether either of these limitations is identical to the earlier claimed "*the user's eyes*" (in claim 11, line 5); or whether this limitation is distinct and independent from the earlier claimed "*the user's eyes*".

41. Claim 18 recites the limitation "*at least one viewing display*" (in line 5). There is insufficient antecedent basis for this limitation in the claim.

42. Claim 19 recites the limitation "*information*" (in lines 1 and 3). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation. For example, it would be unclear to an artisan whether a single element of "*information*" is being claimed; or rather whether a plurality of "*information*" elements are being claimed.

43. Claim 19 recites the limitation "*headgear*" (in line 2). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

44. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*information*" (in line 3). It would be unclear to one having ordinary skill in the art whether this limitation is identical to the earlier claimed "*information*" (in line 1); or whether this limitation is distinct and independent from the earlier claimed "*information*".

An omitted structural cooperative relationship results from the claimed subject matter: "*the display*" (in line 5). It would be unclear to one having ordinary skill in the art whether this limitation refers to the earlier claimed "*display assembly*" (in line 3) or "*display*" (in line 3).

45. Claim 19 recites the limitation "*orientation*" (in line 5). The lack of a grammatical article (such as "*a*" or "*a plurality of*" or "*the*" or "*said*") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

46. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*two side members*" (in line 6). It would be unclear to one having ordinary skill in the art whether this limitation is identical to the earlier claimed "*upright side members*" (in claim 19,

line 10); or whether this limitation is distinct and independent from the earlier claimed "*upright side members*".

47. The remaining claims are rejected under 35 U.S.C. 112, second paragraph, as being dependent upon rejected base claims.

Claim Rejections - 35 USC § 102

48. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

49. Claims 1-5, 7-15, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by *Ichikawa et al* (US 5,266,930 A).

Regarding claim 1, Ichikawa discloses a headgear system comprising:

headgear [e.g., Fig. 1; 5] with an upper headgear portion for being worn on a user's head and a lower headgear portion extending from the upper headgear portion for extending forwardly relative to a lower front portion of the user's head and below the user's eyes (see the entire document, including see Fig. 1; Column 8, Lines 6-59); and

a display assembly [e.g., Fig. 1; 11] mounted inside the headgear (see the entire document, including see Fig. 1) to the lower headgear portion for being located below at least

one of the user's eyes so as not to obstruct the user's vision (see the entire document, including see Column 8, Line 60 - Column 9, Line 9),

the display assembly [e.g., Fig. 1; 14] having an adjustable mount [e.g., Fig. 2; 15-21] and a viewing display mounted to the adjustable mount with direct viewing optics [e.g., Fig. 1; 6] facing the user and positioned inward from the lower headgear portion for displaying information,

the direct viewing optics being located on the adjustable mount (see the entire document, including wherein the direct viewing optics [e.g., Fig. 1; 6] are connected to the adjustable mount [e.g., Fig. 2; 15-21] via the headgear [e.g., Fig. 1; 5]) in a position for being below the user's eyes so that for distance vision,

line of sight of the user passes over the direct viewing optics (see the entire document, including see Fig. 1), the information being visible when said at least one of the user's eyes looks downwardly at the viewing display (see the entire document, including see Fig. 1; eyesight line) where the direct viewing optics face and are substantially inline with at least one of the user's eyes downwardly looking eyes,

the display assembly being configured to be adjustable by the user while the headgear system is worn by the user for changing orientation of the viewing display and the direct viewing optics (see the entire document, including see Figs. 2 & 3; Column 9, Lines 10-58),

the display assembly having a first rotatable joint [e.g., Fig. 2; 18] that is rotatable about a rotatable horizontal axis for allowing the display to be tilted upwardly and downwardly, and

a second rotatable joint [e.g., Fig. 2; 16] that is rotatable about a rotatable vertical axis for allowing the display to rotate about the vertical axis,

the display being supported by the first rotatable joint between upright side members [e.g., Fig. 2; 17] that extend upright from the second rotatable joint and surround the vertical axis on opposing sides (see the entire document, including see Figs. 2 & 3; Column 9, Lines 10-22 -- wherein, it is further noted that if the user spun in place, the viewing display would also rotate about a vertical axis relative to the ground).

Regarding claim 2, Ichikawa discloses the headgear is a helmet [e.g., Fig. 1; 5], and the lower headgear portion is a face bar (see the entire document, including see Fig. 1; Column 8, Lines 6-14).

Regarding claim 3, Ichikawa discloses the display assembly includes at least one rotatable joint [e.g., Fig. 2; 21] having frictional resistance so that the joint remains in a particular orientation until moved by the user (see the entire document, including see Column 9, Lines 28-58).

Regarding claim 4, Ichikawa discloses the viewing display is sized for viewing by one of the user's eyes when said one of the user's eyes looks downwardly (see the entire document, including see Fig. 1; Column 8, Lines 6-14).

Regarding claim 5, Ichikawa discloses the viewing display displays images which are focused to appear to be at optical infinity (see the entire document, including see Fig. 1; Column 8, Lines 6-14).

Regarding claim 7, Ichikawa discloses the display assembly comprises:

a base [e.g., Fig. 2; 16] for mounting to the face bar of the helmet, the base having a circular recess that is connected to an entrance slot (see the entire document, including see Fig. 4);

a rotatable member [e.g., Fig. 4; 19] having at least a partial circular portion that has a snap fit into the circular recess of the base through the entrance slot,

the rotatable member being rotatable within the circular recess about the vertical axis;
and two side members [e.g., Fig. 2; 17] extending from the rotatable member,

the display being rotatably mounted between the side members along the horizontal axis
(see the entire document, including see Column 9, Lines 10-58).

Regarding claim 8, Ichikawa discloses the display assembly [e.g., Figs. 32 & 34; 737] is mounted to the face bar of the helmet for being below a first eye [e.g., Figs. 32 & 34; E_R] of the user,

the headgear system further comprising a second base [e.g., Figs. 32 & 34; 738] mounted to the face bar of the helmet for being below a second eye [e.g., Figs. 32 & 34; E_L] of the user to allow the user to select the position of at least one display by snap fitting an associated rotatable member into the desired base (see the entire document, including see Column 8, Lines 3-14 & 40-61; as well as Column 19, Lines 9-17).

Regarding claim 9, this claim is rejected by the reasoning applied in rejecting claims 1 and 6; furthermore, Ichikawa discloses a headgear system comprising:

headgear [e.g., Fig. 1; 5] for being worn by a user; and

a display assembly [e.g., Fig. 1; 11] having a display mounted to the headgear, the display assembly being configured to be adjustable by the user while the headgear system is worn by the user for changing orientation of the display,

the display assembly having a first rotatable joint [e.g., Figs. 2-3; 18] that is rotatable about a rotatable horizontal axis for allowing the viewing display to be tilted upwardly and downwardly [e.g., see Fig. 2; wherein the illustrated left-to-right adjustment motion arrow will result in moving the holographic image up-or-down on the helmet visor], and

a second rotatable joint [e.g., Figs. 2-3; 16] that is rotatable about a rotatable vertical axis for allowing the viewing display to rotate about the vertical axis [e.g., see Fig. 3; wherein the illustrated left-to-right adjustment motion arrow will result in display rotation about a vertical axis] (see the entire document, including see Column 9, Lines 10-22),

the display being supported by the first rotatable joint between upright side members [e.g., Fig. 2; 17] that extend upright from the second rotatable joint and surround the vertical axis on opposing sides (see the entire document, including see Figs. 2 & 3; Column 9, Lines 10-22 -- wherein, it is further noted that if the user spun in place, the viewing display would also rotate about a vertical axis relative to the ground).

Regarding claim 10, this claim is rejected by the reasoning applied in rejecting claim 7.

Regarding claim 11, this claim is rejected by the reasoning applied in rejecting claim 1.

Regarding claim 12, this claim is rejected by the reasoning applied in rejecting claim 2.

Regarding claim 13, this claim is rejected by the reasoning applied in rejecting claim 3.

Regarding claim 14, this claim is rejected by the reasoning applied in rejecting claim 4.

Regarding claim 15, this claim is rejected by the reasoning applied in rejecting claim 5.

Regarding claim 17, this claim is rejected by the reasoning applied in rejecting claim 7.

Regarding claim 18, this claim is rejected by the reasoning applied in rejecting claim 8.

Regarding claim 19, this claim is rejected by the reasoning applied in rejecting claims 1 and 6.

Regarding claim 20, this claim is rejected by the reasoning applied in rejecting claim 7.

Response to Arguments

50. Applicants' arguments filed 5 March 2008 have been fully considered but they are not persuasive.

The applicants contend, "*Accordingly, Claims 1-5, 7-15 and 17-20, as amended, are not anticipated by Ichikawa, since Ichikawa does not teach or suggest, 'the display assembly having a first rotatable joint that is rotatable about a rotatable horizontal axis for allowing the display to be tilted upwardly and downwardly, and a second rotatable joint that is rotatable about a rotatable vertical axis for allowing the display to rotate about the vertical axis, the display being supported by the first rotatable joint between upright side members that extend upright from the second rotatable joint and surround the vertical axis on opposing sides' as recited in base Claim 1, as amended, and similarly in Claim 11, as amended, or 'the display being supported by the first rotatable joint between upright side members that extend upright from the second rotatable joint and surround the vertical axis on opposing sides', as recited in claims 9 and 19, as amended. Furthermore, Ichikawa does not teach or suggest 'a rotatable member having at least a partial circular portion that has a snap fit into the circular recess of the base through the entrance slot, the rotatable member being rotatable within the circular recess about the vertical axis,' as recited in Claims 7, 10, and similarly in Claims 17 and 20, as amended. Finally, Ichikawa does not teach or suggest 'a second base mounted to the face bar of the helmet for being below a second eye of the user to allow the user to select the position of at least one viewing display by snap titling an associated rotatable member into the desired base' as recited in Claim 8, and similarly in Claim 18. Therefore, Claims 1-5, 7-15 and 17-20, as amended, are in condition for allowance. Reconsideration is respectfully requested"* (see the entire document, including see Pages 11-12 of the Amendment filed 5 March 2008). However, the examiner respectfully disagrees.

Ichikawa discloses a display assembly [e.g., Fig. 1; 11] having a first rotatable joint [e.g., Fig. 2; 18] that is rotatable about a rotatable horizontal axis for allowing the display to be tilted upwardly and downwardly, and

a second rotatable joint [e.g., Fig. 2; 16] that is rotatable about a rotatable vertical axis for allowing the display to rotate about the vertical axis,

the display being supported by the first rotatable joint between upright side members [e.g., Fig. 2; 17] that extend upright from the second rotatable joint and surround the vertical axis on opposing sides (see the entire document, including see Figs. 2 & 3; Column 9, Lines 10-22).

Additionally, Ichikawa discloses a rotatable member [e.g., Fig. 4; 19] having at least a partial circular portion that has a snap fit into the circular recess of the base through the entrance slot, the rotatable member being rotatable within the circular recess about the vertical axis (see the entire document, including see Column 9, Lines 10-58).

And lastly, Ichikawa discloses a second base [e.g., Figs. 32 & 34; 738] mounted to the face bar of the helmet for being below a second eye [e.g., Figs. 32 & 34; E_L] of the user to allow the user to select the position of at least one display by snap fitting an associated rotatable member into the desired base (see the entire document, including see Column 8, Lines 3-14 & 40-61; as well as Column 19, Lines 9-17).

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Applicant's arguments with respect to claims 1-5, 7-15, and 17-20 have been considered but are moot in view of the new ground(s) of rejection.

By such reasoning, rejection of the claims is deemed proper, necessary, and thereby maintained at this time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Piziali/
Primary Examiner, Art Unit 2629
5 June 2008